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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/650,939

08/28/2003

Dana M. Serrels

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22851

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11/28/2006

DELPHI TECHNOLOGIES, INC.

M/C 480-410-202

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EXAMINER

JOYCE, WILLIAM C

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/650,939	<b>Applicant(s)</b> SERRELS ET AL.	
	<b>Examiner</b> William C. Joyce	<b>Art Unit</b> 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) 8-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This Office Action is in response to the amendment filed September 19, 2006 for the above identified patent application.

#### *Election/Restrictions*

1. Applicant's election with traverse of Group I in the reply filed on September 19, 2006 is acknowledged. The traversal is on the ground(s) that searching groups I and II does not place a serious burden on the Examiner and each group contains similar limitations of forming a retainer by riveting. Applicant arguments are not found persuasive for the following reasons. First, each group has a different classification, and therefore prosecuting both groups would require searching different inventive concepts in different fields. Second, it is noted that the process of claim 8 can be used to make another and materially different product. For example, Claim 8 defines "providing...a single shoulder for supporting **an outer race** of the bearing" (lines 3-4), but claims 1 and 20 define "a single shoulder for supporting the bearing" (line 4). Accordingly, the process of claim 8 is used to make a bearing arrangement having an outer race and the apparatus of claims 1 and 20 defines a bearing not requiring an outer race. Further, The bearing device of claims 1 and 20 can be made from a manufacturing operation other than riveting, such as rolling or machining, since it is noted that method limitations in an apparatus claim is given little weight. The requirement is still deemed proper and is therefore made FINAL.

***Drawings***

2. The drawings were received on September 19, 2006. These drawings are objected to because they contain new matter. For example, newly added Figure 6 illustrates 4 arcuate members, but the specification does not appear to describe the bearing arrangement as having 4 arcuate members. Applicant must cancel Figure 6 because it contains new matter.

3. In view of the above objection, the drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “plurality of arcuate shaped members” (claim 20) “a gap is disposed between each of the plurality of arcuate shaped members” (claim 22) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. (US Pub. 2002/0095790).

Sasaki et al. illustrates a bearing having: a bearing pocket defining a bearing opening for receiving the bearing therein, said bearing pocket having a single shoulder for supporting the bearing and a unitary outer wall extending therefrom, said unitary outer wall defining a portion of said bearing pocket, said unitary outer wall being defined by a uniform inner diameter corresponding to an outer diameter of the bearing; and a retention feature for retaining the bearing in said bearing pocket, said retention feature being formed from a portion of said outer wall after the bearing is inserted in said bearing opening, wherein said retention feature is formed using a tool under force to an outer surface of said outer wall after the bearing is inserted into said bearing pocket.

Sasaki et al. does not disclose the newly added limitation "wherein the retention feature can withstand a force greater than 6500 Newtons, however it is noted the holding capacity of the retention feature is based primarily on its size and the material from which it is made. Since the prior art teaches the claimed structural features, it would have been obvious to one in the art to modify the size and/or the material from which the retention feature is formed so as to withstand the claimed force, thereby preventing movement of the bearing in an application having the claimed force.

The method limitation "radial riveting process" in an apparatus claim has been given limited patentable weight.

With respect to claim 3, it is noted that "a percentage" may include 100%.

With respect to claim 4, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the outer wall from aluminum, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

With respect to claim 7, Sasaki et al. illustrates in Figure 4 a retention feature at both ends of the bearing.

6. Claims 1-7 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandenstein et al. (US Patent 4,888,862).

Brandenstein et al. illustrates a bearing having: a bearing pocket defining a bearing opening for receiving the bearing therein, said bearing pocket having a single

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shoulder for supporting the bearing and a unitary outer wall extending therefrom, said unitary outer wall defining a portion of said bearing pocket, said unitary outer wall being defined by a uniform inner diameter corresponding to an outer diameter of the bearing; and a retention feature for retaining the bearing in said bearing pocket, said retention feature being formed from a portion of said outer wall after the bearing is inserted in said bearing opening, wherein said retention feature is formed using a tool under force to an outer surface of said outer wall after the bearing is inserted into said bearing pocket.

Brandenstein et al. does not disclose the newly added limitation “wherein the retention feature can withstand a force greater than 6500 Newtons, however it is noted the holding capacity of the retention feature is based primarily on its size and the material from which it is made. Since the prior art teaches the claimed structural features, it would have been obvious to one in the art to modify the size and/or the material from which the retention feature is formed so as to withstand the claimed force, thereby preventing movement of the bearing in an application having the claimed force.

The method limitation “radial riveting process” in an apparatus claim has been given limited patentable weight.

With respect to claim 3, it is noted that “a percentage” may include 100%.

With respect to claim 4, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the outer wall from aluminum, since it has been held to be within the general skill of a worker in the art to select a known

material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

7. Claims 1-7 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muraki et al. (US Publication 2002/0172443).

Muraki et al. teaches a bearing having: a bearing pocket defining a bearing opening for receiving the bearing therein, said bearing pocket having a single shoulder for supporting the bearing and a unitary outer wall extending therefrom, said unitary outer wall defining a portion of said bearing pocket, said unitary outer wall being defined by a uniform inner diameter corresponding to an outer diameter of the bearing; and a retention feature for retaining the bearing in said bearing pocket, said retention feature being formed from a portion of said outer wall after the bearing is inserted in said bearing opening, wherein said retention feature is formed using a tool under force to an outer surface of said outer wall after the bearing is inserted into said bearing pocket.

Muraki et al. does not disclose the newly added limitation "wherein the retention feature can withstand a force greater than 6500 Newtons, however it is noted the holding capacity of the retention feature is based primarily on its size and the material from which it is made. Since the prior art teaches the claimed structural features, it would have been obvious to one in the art to modify the size and/or the material from which the retention feature is formed so as to withstand the claimed force, thereby preventing movement of the bearing in an application having the claimed force.



The method limitation "radial riveting process" in an apparatus claim has been given limited patentable weight.

With respect to claim 3, it is noted that "a percentage" may include 100%.

With respect to claim 4, Muraki et al. discloses the bearing pocket can be made from aluminum.

With respect to claim 20, Muraki et al. discloses the bent portions can be formed at three locations.

8. Claims 1-7, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radocaj (US Patent 6,941,651).

Radocaj teaches a bearing having: a bearing pocket defining a bearing opening for receiving the bearing therein, said bearing pocket having a single shoulder for supporting the bearing and a unitary outer wall extending therefrom, said unitary outer wall defining a portion of said bearing pocket, said unitary outer wall being defined by a uniform inner diameter corresponding to an outer diameter of the bearing; and a retention feature for retaining the bearing in said bearing pocket, said retention feature being formed from a portion of said outer wall after the bearing is inserted in said bearing opening, wherein said retention feature is formed using a tool under force to an outer surface of said outer wall after the bearing is inserted into said bearing pocket.

Radocaj does not disclose the newly added limitation "wherein the retention feature can withstand a force greater than 6500 Newtons, however it is noted the holding capacity of the retention feature is based primarily on its size and the material

from which it is made. Since the prior art teaches the claimed structural features, it would have been obvious to one in the art to modify the size and/or the material from which the retention feature is formed so as to withstand the claimed force, thereby preventing movement of the bearing in an application having the claimed force.

The method limitation "radial riveting process" in an apparatus claim has been given limited patentable weight.

With respect to claim 3, it is noted that "a percentage" may include 100%.

With respect to claim 4, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the outer wall from aluminum, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

### ***Response to Arguments***

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (571) 272-7107. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 11/24/06  
William C. Joyce